OIPE

RAW SEQUENCE LISTING   DATE: 02/28/2002
PATENT APPLICATION: US/10/067,813   TIME: 10:26:41

Input Set : N:\Crf3\RULE60\10067813.raw.txt
Output Set: N:\CRF3\02282002\J067813.raw

```
 1 <110> APPLICANT: Renauld, Jean-Christophe
 2        Louahed, Jamila
 3        Grasso, Luigi
 4        Levitt, Roy
 5        Nicolaides, Nicholas
 6 <120> TITLE OF INVENTION: Asthma Associated Factors as Targets for Treating
 7        Atopic Allergies and Related Disorders
 8 <130> FILE REFERENCE: 036870-5071
 9 <140> CURRENT APPLICATION NUMBER: 10/067,813
10 <141> CURRENT FILING DATE: 2002-02-08
12 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/157,247
13 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-09-18
14 <160> NUMBER OF SEQ ID NOS: 17
15 <170> SOFTWARE: PatentIn Ver. 2.0
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 1119
19 <212> TYPE: DNA
20 <213> ORGANISM: Murinae gen. sp.
21 <220> FEATURE:
22 <221> NAME/KEY: CDS
23 <222> LOCATION: (19)..(642)
24 <400> SEQUENCE: 1
25        ggcctgacta ccagaaac atg gcg acc agc gct gtt cca agt gaa aac ctt   51
26                            Met Ala Thr Ser Ala Val Pro Ser Glu Asn Leu
27                             1               5                  10
28        ccc aca tat aaa cta gta gtg gtg gga gat ggt ggt gtg ggc aag agt   99
29        Pro Thr Tyr Lys Leu Val Val Val Gly Asp Gly Gly Val Gly Lys Ser
30                     15                  20                  25
31        gcg ctc act att cag ttt ttc cag aag atc ttt gtg cct gac tac gac  147
32        Ala Leu Thr Ile Gln Phe Phe Gln Lys Ile Phe Val Pro Asp Tyr Asp
33                     30                  35                  40
34        ccc acc att gaa gac tcc tac ctg aag cat aca gag att gac aat cag  195
35        Pro Thr Ile Glu Asp Ser Tyr Leu Lys His Thr Glu Ile Asp Asn Gln
36                 45                  50                  55
37        tgg gcc atc ttg gat gtt ctg gac aca gcc ggg cag gag gag ttc agt  243
38        Trp Ala Ile Leu Asp Val Leu Asp Thr Ala Gly Gln Glu Glu Phe Ser
39         60                  65                  70                  75
40        gcc atg cgg gaa caa tac atg cgc aca ggg gat ggc ttc ctc att gtc  291
41        Ala Met Arg Glu Gln Tyr Met Arg Thr Gly Asp Gly Phe Leu Ile Val
42                         80                  85                  90
43        tac tcc gtc acc gac aag gcc agc ttc gag cac gtg gac cgc ttc cac  339
44        Tyr Ser Val Thr Asp Lys Ala Ser Phe Glu His Val Asp Arg Phe His
45                     95                 100                 105
```

```
                    RAW SEQUENCE LISTING              DATE: 02/28/2002
                    PATENT APPLICATION:  US/10/067,813    TIME: 10:26:41

                    Input Set : N:\Crf3\RULE60\10067813.raw.txt
                    Output Set: N:\CRF3\02282002\J067813.raw
```

```
46          cag ctc att ctg cgt gtc aag gac agg gag tca ttc cca atg atc ctc    387
47          Gln Leu Ile Leu Arg Val Lys Asp Arg Glu Ser Phe Pro Met Ile Leu
48                  110                 115                 120
49          gtg gcc aac aag gtg gat ctg atg cac cta agg aaa gtc acc agg gac    435
50          Val Ala Asn Lys Val Asp Leu Met His Leu Arg Lys Val Thr Arg Asp
51                  125                 130                 135
52          caa gga aaa gaa atg gca acc aaa tac aat atc cca tat ata gag acc    483
53          Gln Gly Lys Glu Met Ala Thr Lys Tyr Asn Ile Pro Tyr Ile Glu Thr
54          140                 145                 150                 155
55          agt gcc aag gac ccg cct ctc aac gtg gat aaa acc ttc cat gac cta    531
56          Ser Ala Lys Asp Pro Pro Leu Asn Val Asp Lys Thr Phe His Asp Leu
57                  160                 165                 170
58          gtt aga gta att agg caa cag gtt cca gag aaa aac cag aag aag aaa    579
59          Val Arg Val Ile Arg Gln Gln Val Pro Glu Lys Asn Gln Lys Lys Lys
60                  175                 180                 185
61          aag aag aca aaa tgg cga gga gac agg gcc acc ggc act cac aaa ctg    627
62          Lys Lys Thr Lys Trp Arg Gly Asp Arg Ala Thr Gly Thr His Lys Leu
63                  190                 195                 200
64          cag tgt gtc atc ttg tgacagcctg aagccctggg catagcaacc gtgaactgcc    682
65          Gln Cys Val Ile Leu
66                  205
67          agccctggg accagcccac tgcctaactg cactgagaac cacttctaac tacagccctt 742
68          ggctcttgga ctgggcattg gaagggaatg agggaggagg gggcagaagc aggccggggc 802
69          tggctttgct gcctgtccca ggagacaggg ctacagcttc caaacctttt gtgtgttgac 862
70          tgagcccagt tcccagtctc ttggtgggct tgtttctttt aactcatagg ctggtttgct 922
71          atggaagtgc ttacccacat acaacgcacc agacaagcca tgagcaagct tcctccctgt 982
72          cccatcccca gtgtctgagc tcttgtgtct tttgtagatt tttaaattat ttgagtaatg 1042
73          attattttat taaagaggtg tgtgcccatt gcctgcgaag ccccaagtct ttggcagacc 1102
74          tctgataaat gtctgca                                                1119
76 <210> SEQ ID NO: 2
77 <211> LENGTH: 208
78 <212> TYPE: PRT
79 <213> ORGANISM: Murinae gen. sp.
80 <400> SEQUENCE: 2
81          Met Ala Thr Ser Ala Val Pro Ser Glu Asn Leu Pro Thr Tyr Lys Leu
82          1                   5                   10                  15
83          Val Val Val Gly Asp Gly Gly Val Gly Lys Ser Ala Leu Thr Ile Gln
84                  20                  25                  30
85          Phe Phe Gln Lys Ile Phe Val Pro Asp Tyr Asp Pro Thr Ile Glu Asp
86                  35                  40                  45
87          Ser Tyr Leu Lys His Thr Glu Ile Asp Asn Gln Trp Ala Ile Leu Asp
88              50                  55                  60
89          Val Leu Asp Thr Ala Gly Gln Glu Glu Phe Ser Ala Met Arg Glu Gln
90          65                  70                  75                  80
91          Tyr Met Arg Thr Gly Asp Gly Phe Leu Ile Val Tyr Ser Val Thr Asp
92                  85                  90                  95
93          Lys Ala Ser Phe Glu His Val Asp Arg Phe His Gln Leu Ile Leu Arg
94                  100                 105                 110
95          Val Lys Asp Arg Glu Ser Phe Pro Met Ile Leu Val Ala Asn Lys Val
```

```
 96                115                  120                   125
 97      Asp Leu Met His Leu Arg Lys Val Thr Arg Asp Gln Gly Lys Glu Met
 98           130                  135                   140
 99      Ala Thr Lys Tyr Asn Ile Pro Tyr Ile Glu Thr Ser Ala Lys Asp Pro
100        145                  150                   155                  160
101      Pro Leu Asn Val Asp Lys Thr Phe His Asp Leu Val Arg Val Ile Arg
102                     165                  170                   175
103      Gln Gln Val Pro Glu Lys Asn Gln Lys Lys Lys Lys Thr Lys Trp
104                     180                  185                   190
105      Arg Gly Asp Arg Ala Thr Gly Thr His Lys Leu Gln Cys Val Ile Leu
106                     195                  200                   205
108 <210> SEQ ID NO: 3
109 <211> LENGTH: 1085
110 <212> TYPE: DNA
111 <213> ORGANISM: Homo sapiens
112 <220> FEATURE:
113 <221> NAME/KEY: CDS
114 <222> LOCATION: (102)..(725)
115 <400> SEQUENCE: 3
116      cggcggcgac gctgcctcct caccggcgca ggctaggagg gggcggcctg agtgccgtag  60
117      ccgagccggg gctggagcgc gcggtctgac ctacgagaaa c atg gcg acc agc gcc 116
118                                                   Met Ala Thr Ser Ala
119                                                    1               5
120      gtc ccc agt gac aac ctc ccc aca tac aag ctg gtg gtg gtg ggg gat  164
121      Val Pro Ser Asp Asn Leu Pro Thr Tyr Lys Leu Val Val Val Gly Asp
122                      10                  15                  20
123      ggg ggt gtg ggc aaa agt gcc ctc acc atc cag ttt ttc cag aag atc  212
124      Gly Gly Val Gly Lys Ser Ala Leu Thr Ile Gln Phe Phe Gln Lys Ile
125                      25                  30                  35
126      ttt gtg cct gac tat gac ccc acc att gaa gac tcc tac ctg aaa cat  260
127      Phe Val Pro Asp Tyr Asp Pro Thr Ile Glu Asp Ser Tyr Leu Lys His
128                      40                  45                  50
129      acg gag att gac aat caa tgg gcc atc ttg gac gtt ctg gac aca gct  308
130      Thr Glu Ile Asp Asn Gln Trp Ala Ile Leu Asp Val Leu Asp Thr Ala
131           55                  60                  65
132      ggg cag gag gaa ttc agc gcc atg cgg gag caa tac atg cgc acg ggg  356
133      Gly Gln Glu Glu Phe Ser Ala Met Arg Glu Gln Tyr Met Arg Thr Gly
134      70                  75                  80                  85
135      gat ggc ttc ctc atc gtc tac tcc gtc act gac aag gcc agc ttt gag  404
136      Asp Gly Phe Leu Ile Val Tyr Ser Val Thr Asp Lys Ala Ser Phe Glu
137                      90                  95                  100
138      cac gtg gac cgc ttc cac cag ctt atc ctg cgc gtc aaa gac agg gag  452
139      His Val Asp Arg Phe His Gln Leu Ile Leu Arg Val Lys Asp Arg Glu
140                     105                  110                  115
141      tca ttc ccg atg atc ctc gtg gcc aac aag gtc gat ttg atg cac ttg  500
142      Ser Phe Pro Met Ile Leu Val Ala Asn Lys Val Asp Leu Met His Leu
143                     120                  125                  130
144      agg aag atc acc agg gag caa gga aaa gaa atg gcg acc aaa cac aat  548
145      Arg Lys Ile Thr Arg Glu Gln Gly Lys Glu Met Ala Thr Lys His Asn
```

RAW SEQUENCE LISTING   DATE: 02/28/2002
PATENT APPLICATION: US/10/067,813   TIME: 10:26:41

Input Set : N:\Crf3\RULE60\10067813.raw.txt
Output Set: N:\CRF3\02282002\J067813.raw

```
146           135                 140                 145
147      att ccg tac ata gaa acc agt gcc aag gac cca cct ctc aat gtc gac   596
148      Ile Pro Tyr Ile Glu Thr Ser Ala Lys Asp Pro Pro Leu Asn Val Asp
149      150                 155                 160                 165
150      aaa gcc ttc cat gac ctc gtt aga gta att agg caa cag att ccg gaa   644
151      Lys Ala Phe His Asp Leu Val Arg Val Ile Arg Gln Gln Ile Pro Glu
152                      170                 175                 180
153      aaa agc cag aag aag aag aag aaa acc aaa tgg cgg gga gac cgg gcc   692
154      Lys Ser Gln Lys Lys Lys Lys Lys Thr Lys Trp Arg Gly Asp Arg Ala
155                      185                 190                 195
156      aca ggc acc cac aaa ctg caa tgt gtg atc ttg tgaggcctgc aggcctgaag 745
157      Thr Gly Thr His Lys Leu Gln Cys Val Ile Leu
158                      200                 205
159      gcctcgggca cagtgacggt ggcctggcca gccctcggga cccctcccca cctaactgca 805
160      ctgaaaccat ttctaaccac aacccttggc ccaaggactt ggtacaggaa gggagaaggg 865
161      caggtgggca gggagcaaga cagggtctgg cttttgccaa gaggaacggg gcttttttcca 925
162      ccttcttcaa aagagacaag ggaaggccac ctgttaaagc aggaagcagc atcaagttgc 985
163      cccttgggcc cccccatgtt gtttggattt caaaccgggt ttccttcccc cttcttttcg 1045
164      ggttgggtgt tgttggttat ttggttaact acatatggtt                       1085
166 <210> SEQ ID NO: 4
167 <211> LENGTH: 208
168 <212> TYPE: PRT
169 <213> ORGANISM: Homo sapiens
170 <400> SEQUENCE: 4
171      Met Ala Thr Ser Ala Val Pro Ser Asp Asn Leu Pro Thr Tyr Lys Leu
172      1               5                   10                  15
173      Val Val Val Gly Asp Gly Gly Val Gly Lys Ser Ala Leu Thr Ile Gln
174                      20                  25                  30
175      Phe Phe Gln Lys Ile Phe Val Pro Asp Tyr Asp Pro Thr Ile Glu Asp
176                      35                  40                  45
177      Ser Tyr Leu Lys His Thr Glu Ile Asp Asn Gln Trp Ala Ile Leu Asp
178              50                  55                  60
179      Val Leu Asp Thr Ala Gly Gln Glu Glu Phe Ser Ala Met Arg Glu Gln
180      65                  70                  75                  80
181      Tyr Met Arg Thr Gly Asp Gly Phe Leu Ile Val Tyr Ser Val Thr Asp
182                      85                  90                  95
183      Lys Ala Ser Phe Glu His Val Asp Arg Phe His Gln Leu Ile Leu Arg
184                      100                 105                 110
185      Val Lys Asp Arg Glu Ser Phe Pro Met Ile Leu Val Ala Asn Lys Val
186              115                 120                 125
187      Asp Leu Met His Leu Arg Lys Ile Thr Arg Glu Gln Gly Lys Glu Met
188              130                 135                 140
189      Ala Thr Lys His Asn Ile Pro Tyr Ile Glu Thr Ser Ala Lys Asp Pro
190      145                 150                 155                 160
191      Pro Leu Asn Val Asp Lys Ala Phe His Asp Leu Val Arg Val Ile Arg
192              165                 170                 175
193      Gln Gln Ile Pro Glu Lys Ser Gln Lys Lys Lys Lys Lys Thr Lys Trp
194              180                 185                 190
195      Arg Gly Asp Arg Ala Thr Gly Thr His Lys Leu Gln Cys Val Ile Leu
```

RAW SEQUENCE LISTING   DATE: 02/28/2002
PATENT APPLICATION: US/10/067,813   TIME: 10:26:41

     Input Set : N:\Crf3\RULE60\10067813.raw.txt
     Output Set: N:\CRF3\02282002\J067813.raw

```
196              195              200              205
198 <210> SEQ ID NO: 5
199 <211> LENGTH: 19
200 <212> TYPE: PRT
201 <213> ORGANISM: Homo sapiens
202 <400> SEQUENCE: 5
203      Cys Lys Lys Lys Thr Lys Trp Arg Gly Asp Arg Ala Thr Gly Thr His
204       1           5              10              15
205      Lys Leu Gln
207 <210> SEQ ID NO: 6
208 <211> LENGTH: 24
209 <212> TYPE: DNA
210 <213> ORGANISM: Murinae gen. sp.
211 <400> SEQUENCE: 6
212      agcactctcc agcctctcac cgca                                  24
214 <210> SEQ ID NO: 7
215 <211> LENGTH: 12
216 <212> TYPE: DNA
217 <213> ORGANISM: Murinae gen. sp.
218 <400> SEQUENCE: 7
219      gatctgcggt ga                                               12
221 <210> SEQ ID NO: 8
222 <211> LENGTH: 24
223 <212> TYPE: DNA
224 <213> ORGANISM: Murinae gen. sp.
225 <400> SEQUENCE: 8
226      accgacgtcg actatccatg aaca                                  24
228 <210> SEQ ID NO: 9
229 <211> LENGTH: 12
230 <212> TYPE: DNA
231 <213> ORGANISM: Murinae gen. sp.
232 <400> SEQUENCE: 9
233      gatctgttca tg                                               12
235 <210> SEQ ID NO: 10
236 <211> LENGTH: 24
237 <212> TYPE: DNA
238 <213> ORGANISM: Murinae gen. sp.
239 <400> SEQUENCE: 10
240      aggcaactgt gctatccgag ggaa                                  24
242 <210> SEQ ID NO: 11
243 <211> LENGTH: 12
244 <212> TYPE: DNA
245 <213> ORGANISM: Murinae gen. sp.
246 <400> SEQUENCE: 11
247      gatcttccct cg                                               12
249 <210> SEQ ID NO: 12
250 <211> LENGTH: 18
251 <212> TYPE: DNA
252 <213> ORGANISM: Murinae gen. sp.
```

VERIFICATION SUMMARY   DATE: 02/28/2002
PATENT APPLICATION: US/10/067,813   TIME: 10:26:42

Input Set : **N:\Crf3\RULE60\10067813.raw.txt**
Output Set: **N:\CRF3\02282002\J067813.raw**

L:13 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD